

ATTACHMENT

COMPILATION OF BREAK-OUT GROUP RESULTS

The following tables show responses to questions from each break-out group.

QUESTION 1: Do you think the City should move forward with implementation of the preferred alternative using the adjustable-height dam?

	M1	M2	M3	P1	P2	R1	R2	T 1	TOTAL
YES	8	9	4	12	2	2	4	4	45
NO	1	1	2	1	5	0	1	2	13
UNDECIDED	1	0	2	1	2	4	0	0	10
TOTAL VOTES									68

REASONS IN FAVOR OF MOVING FORWARD WITH DAM

A = Group priority by reporting out x = Group discussion

	M1	M2	M3	P1	P2	P3	R1	R2	T
COST/ LEGAL/TIMING									
Lowest cost, affordable	A	A					A		x
Reduces arsenic removal cost								A	
Have to take action now, use or lose water rights	A	x	x	x				x	
No transport issues across Pueblos							x		
TECHNICAL SUPERIORITY									
Engineering and hydrology make sense					A				x
Logical progression after consideration given, experts	A	A		B					
Convincing research by engineers, thoughtful plan		x			x				x
Proposal is doable, need to move quickly	x	x			x				
Flexibility in dealing with changes in environmental conditions, repair					A		A	A	x
Lower maintenance, more reliable; dam can't clog with silt like in-stream pipes		x					x	x	x
ENVIRONMENT/ WATER SUPPLY									
Less intrusive, gradual diversion damages less, adds water slowly				x	A		x		x
Increases sustainable supply for the future, take action now for safe dependable supply				A			A	A	
Aquifer restoration and protection		x			A			A	
Water diverted for shorter distance than Angostura; maintain flow in Bernalillo	x	x							
Only alternative that provides for overbank flooding for bosque									x
Diversion can be done in creative way that protects the environment; more easily channels water for silvery minnow						x			x

REASONS FOR BEING OPPOSED OR UNDECIDED ABOUT THE DAM

A = Group priority by reporting out

x = Group discussion

	M1	M2	M3	P1	P2	R1	R2	T
TIMING/ INFORMATION NEEDED								
Need to complete EIS first (requires alternatives); needs to address effect on wildlife		A		x	A	x		
Need more information – biological, treatment process, water quality, baseline hydrologic assessment w/ connection of aquifer and water table	x		A	x	A	A	x	x
Untested assumptions impacting environment				x				x
Need to know fish passage design and habitat protection before implementing.			A			x		
Stay open to better technology; is dam a proven technology?	x	x		x				x
Other alternatives not presented here; need to examine all alternatives		x	A	x	x	A	x	A
Want to see process for selecting preferred alternative & study for narrowing 32 options			A	x	x	x	A	x
Need to know water quality before and after discharge; impact on river hydrology between the diversion and return point.						x		
Want more constant communication in media, study should be on web site and published			A					
Need to look at historic flow levels to know how much we can divert and whether minimum cfs are too low				A				
Want more outreach speaking to civic groups - like Tucson did			x					
Dam seems predetermined			x		x			x
ENVIRONMENTAL CONCERNS								
Environmental “costs” not adequately considered								x
Endangered species			A					
Concern about obstructing fish passage, habitat			x			A		
16 mile gap between diversion and return								A
Want to use San Juan Chama water only for injecting into groundwater							A	
Do not want another dam on river						x		x
Need for commitment to enhance bosque	x							x
Increases river sediment, river not considered adequately							x	A
CONSERVATION								
Have not exhausted efforts, encourages denial, will conserve less, need for conservation	x			x	A		x	x
Overextended resources, encourages pop growth					x			

This set of responses can be loosely divided into 1.) the need for more information, specifically about technology and alternatives, and 2.) ecological, environmental concerns.

QUESTION 2: What should be done to minimize potential negative impacts & increase benefits of this project so that it addresses your concerns & adds value?

ACTIONS TO BE TAKEN

A = Group priority by reporting out or voting

x = Group discussion

	M1	M2	M3	P1	P2	R1	R2	T
RIVER FLOW AND SUPPLY								
Monitor flows at input and output of project	A							
Analyze best time to divert or not, manage dam sensitive to river's natural flow							A	A
Locate new waste treatment plant returns near point of diversion; treatment and return together		A					A	
Flush sediment by timing of dam releases (increase aquatic habitat by managing sediment)							A	
Very high low-flow threshold (above 70, suggested 250)				x		A		
Use annual full quota (excess to recharge aquifer)		A						
Buy additional surface water rights	x			x		x		
Take only San Juan Chama water							x	
Fully utilize adjustable aspects of dam					x			
Continuous flow upstream to help wildlife					A	x		
Watershed restoration; address forest and watershed health at the source				x	A			
Regional aqueduct system with fish passageways	x							
ENHANCEMENTS								
Restore and enhance bosque and watershed, prohibit building in bosque floodplain (beyond mitigation)	A	A	A	A	A	x		x
Major reparation of riparian area between diversion and return points						A		
Bosque flooding	x	A	x	x	A	A		x
Provide sedentary backwater areas for minnow	x					A		
Eradicate non-native salt cedar; restore native plants, replanting of bosque		A	A		A	A		x
Support minnow, include fish passageway and ensure that fish habitat is in place before implementing	x	A	A	x		x		
Use energy efficient "green" buildings and dam, solar power system, low environ impact, water conscious landscaping; dam self-sufficient in energy use	A	A				x		x
Use location by bike path	A							
Recreational and economic use of river as destination, make river amenity, access, reconnect community		A		x	x			
Nature refuge, public education & recreational area, highlight minnow hatchery	x	x	x	x	x	x		x
Signage warning boaters	x							
Flooding impact – define where it will occur	x							
Maximize environmental education opportunities of facility, especially in area of bike path- windows to see pipes, tours of plant to demonstrate water returned to aquifer, water fountain for river water; joint use education, recreation. Water education center.	A	A	x	x		x		x
Storage capacity, settling ponds	x							

MONITORING AND CONSERVATION								
Better accounting of water in the river	A	x						
Meter all users – incl.wells, City & agriculture; meter inflows and outflows throughout MRGCD	A		A			A		x
Use dual water systems; reuse more treated wastewater, use grey water for irrigation, use deep well for drinking only		A		x			x	A
Increase conservation, more city programs	x				A		A	A
Water bill should reflect actual cost of water, raise rates to conserve; revisit penalties and incentives, enforcement			x		A			A
Link water supply with growth planning, establish sustainable population threshold			A	A				
Incentives to bring people off wells			x					
More high-yield, low water crops; land use and vegetation standards to minimize use of water	x		x					
Continual monitoring of water in river, status of fish and other ecological indicators		A	x					
Constant monitoring of all contaminants and communicate results			A					
EDUCATION AND PUBLIC INVOLVEMENT								
Include all aspects of project in discussions								A
Trust building, info, education exchange, citizen involvement so people won't feel "done to" but "doing", include all stakeholders	A	A	x	x		x	x	x
Involve environmental organizations, skeptics	x							
Standardize measurements, terms (e.g.cfs or acre ft/yr)		x						
Better PR and outreach			x	x				
Address future issues				x				
Address regional coordination, buy-in					A	A		x
"Desert Life" conservation package (Tucson) to schools, family, PR to educate population about living in the desert					A			
Facility as environmental and water education center, addressing all water education issues; pilot the plant as an observation/ learning environment.						x		A
Help people understand concern for silvery minnow				x				
Show where and how the water goes				x				
Develop a continuous citizen involvement organization for the Rio Grande (predevelopment bosque); leverage resources using funds and partnerships with environmental and governmental organizations				A				
FURTHER STUDY								
Continued search for latest technologies	x			x				
Study impact of treated water on existing distribution systems	A							
Model impacts of dam on sediment							x	
Assess vulnerability of watershed source vulnerability				x				

QUESTION 3: How confident are you that the river water will be safe to drink, on a scale of 1 (not confident) to 10 (totally confident)?

	M1	M2	M3	P1	P2	R1	R2	T
5.25 average			x					
5.5 average						x		
2,2,10,10 (average 6)								x
7.8 average	x							
8 average					x			
9 average		x						
9 average				x				
9.4 average							x	

All groups rated their confidence in the mid or high ranges, and 3 groups had a high confidence at or above 9. It may be useful to establish a benchmark comparison of confidence levels in the safety of groundwater versus surface water now before the transition begins in order to measure how it changes over time.

Confidence did not increase when participants were told that the treated river water must by law meet or exceed standards required by state and federal regulators in that it must be made safe and aesthetically pleasing to drink; most stated that they were already aware of that and had factored it into their rating.

Question 3.a. What would increase your confidence in water safety?

	M1	M2	M3	P1	P2	R1	R2	T
BETTER TESTING, REPORTING								
Frequent testing						A		
Rethink how City reports water quality to customers; constant monitoring of all contamination, communicate results, publish data (more often than annual report)	x	x	A	x		x		
Publish testing data daily paper, showing the baseline comparison to normal safe ranges so the data is meaningful		x						
Monitor surface water for drugs or possible sabotage		x						
Monitoring of upstream discharge, source water assessment and protection				x		A		
Testing at faucet in every home; random sampling at taps on standard schedule	x							
City make water quality a priority, keep it at the forefront						x		
STANDARDS								
Lower detection level, higher arsenic stds						A		
Silvery minnow would have to be able to live in it	x							
Support higher standards (like Isleta)			x					
Federal funding to help meet Clean Water Act arsenic standards			x			x		
REDUCE CONTAMINATION								

Pipes to houses maintained in good condition	x							
Actions to reduce use of chemicals in agriculture, lawns		x						
Use deep well water for drinking only in separate distribution system; other system – grey water for irrigation								A
Filter out lead & arsenic	x					x		
More money for groundwater protection				x				
Stricter regulations on private well drilling						x		
Industry and professional accountability, eliminate “pollute and pull-out” mentality						A		
MANAGE TRANSITION								
Pilot programs, test water’s effect on different types of plumbing materials first						A	x	
Distribute bottled water for taste tests, at mall, events	x				x			
Contingency plan for plant failure		x	x					
ISO 14,000 qualified plant				x				
PR, splashy public events, media					x			
Highlight experiences from other places that use surface water							x	
TREATMENT PROCESS								
Allow extra sediment settling time seasonally, e.g.during heavy runoff		x						
City lead conservation efforts					x			
Control population					x			

Question 3.b. When asked whether they would be willing to pay extra to enable standards to exceed those required, most gave a qualified “yes.”

	M1	M2	M3	P1	P2	R1	R2	T
Yes					x			
Willing to pay to “polish” at the tap	A							
Cost/ benefit issue		A						
Yes, with concern for lower socioeconomic levels			A			A		
Yes, to “not have lower quality than we have now”, for better quality			x	x				A
Businesses should pay more than residential			A					
Yes, for sustainable water supply								A
Yes, for lower turbidity, closer to groundwater								A
Yes, to protect the river								A
Mixed willingness to pay more; not necessary because must meet standards anyway	x						x	x
Would rather use own water filter that City supplies	x							

Question 3.c. In addition to safety, what other qualities of drinking water are important to you?

	M1	M2	M3	P1	P2	R1	R2	T
Good tasting – no change from present water, “with character” Test-“makes a good cup of coffee”	A	A	A			A	A	A
Not smelly, odorless	A	A	A			A		A
Appearance, colorless, clear	A	A	A			A		A
Reduced staining, deposits		A						
Reliability of service		A						
Free of carcinogens						A		
Non-corrosive, no effect on pipes		A				A		
Safety – at least as good as aquifer								x

QUESTION 4: What should be done to prepare the public for the transition from drinking groundwater to drinking river water?

	M1	M2	M3	P1	P2	R1	R2	T
PUBLICITY AND EDUCATION								
Media campaign-billboards, news, radio; public outreach blitz PR package – videos, TV program	A	A	A		A	A	A	x
Free PSA’s during prime time; televised programming ½ hr. every week			x				x	
PR package – variety of venues - videos, newspaper insert, web site, pamphlets, splashy public events, e.g. “water parade”					x			
Explain why it needs to be done “Preserving our precious Aquifer,” emphasize scarcity issues; information on San Juan, conservation		x				x	x	
Tell people what to expect; use case studies of other communities successes; learn from Tucson	A	x		A				
Emphasize benefits, e.g. reduce arsenic content						x		
Build a model and demonstrate – take to malls; poll—where does your water come from	x	x						
Educate in the schools; make it part of school curriculum	x	A				x		x
Simplify water report ; use standardized terms in communicating	x	x						
Bill stuffer in water bill announcing changes with questionnaire – easy to read and understand							A	
Educational package – interactive computer modeling, focus groups; increase public awareness of river and watershed; use issues that bring awareness, e.g. minnow	x				A	A	A	A
Long term media campaign similar to water conservation campaign, especially when bills rise						x		
Advertise everywhere; advertising signs on all buses		x	x			x		
Testimonials – citizens, celebrities							A	
News give a water updates every day			x				x	
Technical reports available, debate on alternatives								x
MORE PUBLIC INVOLVEMENT								
Continued public involvement; improve community communication through open, free 2-way town		A				x	A	A

meetings; build relationships with the public making sure all previous points are brought up (publications, meetings, electronic and print); hold forums with neighborhood associations, schools, trade and business organizations; City keep communicating with more input processes								
Reach out to everyone affected along the river, especially tribes; ensure habitat for wildlife will continue			x					
1:1 city staff to ratepayers			A					
Speakers' bureau to go out into neighborhoods and established groups – present clearly what is happening		x						
Outreach to Senior Centers			x					
Use customer advisory committee		x						
Develop a continuous citizen involvement method – predevelopment bosque, connect community to river, go beyond mitigation, leverage resources				A				
SAMPLING AND PILOT PROGRAMS								
Taste tests early on, to determine cost and quality to modify water treatment process (not for marketing); blind taste tests; hold tastings (“water and cheese” parties); water sampling programs, public taste surveys; public events to introduce taste		A	A			A	A	x
Survey before and after – then design outreach program based on results		x						
Pilot program, making use of neighborhood assoc; neighborhood ambassador programs (tank water in to neighborhoods to try bottled water) – but check expense	x	A	x			x	x	
Bottled water for everyone; booths with bottled water samples at events (malls, balloon fiesta) similar to Tucson; distribute samples of each to each resident;	A		A		x	x	A	x
Label “this is precious resource, handle with care.”								x
City produce beer from river water	x							
Shut off water for a week, educate	x							
MAINTAIN QUALITY								
Have water remain as good as now, so no complaints		x	x			x		
Avoid mistakes (learn from Tucson)							x	
CONSERVATION AND ENHANCEMENTS								
City become more conservation-minded, restoration projects; 150 gals./ day; new philosophy on true precious value of water (not just as economic resource); revise rate structure to reward conservation and penalize waste, big users pay biggest premium			x		A	x		A
City sponsored restoration projects, support of environmental programs – City provide leadership role					A			
Keep talking to people about connections						x		